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APR 1 5 2002

PATENTS DOCKET NO. 32480/3

OFFICE OF PETITIONS

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Scott G. Adams et al.

Serial No.:

10/082,064

Filed:

February 19, 2002

Conf. No.:

2139

Title:

ACCELEROMETER

Art Unit: 2856

Examiner: Not yet known

Commissioner For Patents Washington, D.C. 20231

PETITION UNDER 37 C.F.R. § 1.10(c) TO ACCORD "DATE-IN" ON EXPRESS MAIL LABEL AS FILING DATE OF PATENT APPLICATION

Applicants hereby petition under 37 C.F.R. § 1.10(c) for the Commissioner to accord the "Date-In" on the Express Mail Label used to mail the above-identified patent application as the Filing Date of the application.

On October 19, 2001, the above-identified patent application was filed using the Express Mail Filing procedure set forth under 37 C.F.R. § 1.10. On March 26, 2002, the Patent Office mailed a Filing Receipt showing the Filing Date for this application as being February 19, 2002. A copy of the Filing Receipt is attached hereto at Tab 1.

As required by 37 C.F.R. § 1.10(c)(1), this petition is being filed within 8 days of the mailing date of the Filing Receipt, and less than two months from the granted Filing Date of February 19, 2002, and thus is being filed promptly.

As required by 37 C.F.R. § 1.10(c)(2), the Express Mail Label Number was placed on the papers making up the application. As permitted by MPEP § 513, the papers making up the application filing were filed with a transmittal letter itemizing the contents of the filing and also identifying the Express Mail Label Number used to file the application. This transmittal letter was labeled Utility Application and Application Fee Transmittal. A copy of the Utility Application and Application Fee Transmittal filed with the application and showing the Express Mail Label Number is attached hereto at Tab 2. Similarly, a Return Postcard and a Certificate of Express Mailing were filed with the application itemizing the contents of the filing and also identifying the Express Mail Label Number. A copy of the Return Postcard filed with

the application and showing the Express Mail Label Number is attached hereto at Tab 3. A copy of the Certificate of Express Mailing filed with the application and showing the Express Mail Label Number is attached hereto at Tab 4. Finally, the Application's cover sheet and first page, and the Declaration and Power of Attoreny filed therewith, also identify the Express Mail Label Number. Copies of the cover page and first page of the application showing the Express Mail Label Number are attached hereto at Tab 5. A copy of the Declaration and Power of Attorney filed with the application and showing the Express Mail Label Number is attached hereto at Tab 6.

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Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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on April 3, 2002.

Typed or printed name of person signing this certificate:

Matthew T. Byrne

Signature

Respectfully submitted,

Matthew T. Byrne

Registration No. 40,934

SHEARMAN & STERLING

Customer No. 26155

599 Lexington Avenue

New York, New York 10022

(212) 848-4000 (voice)

(212) 848-7179 (fax)







AND TRADEMARK OFFICE OF PETITIONS

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
WWW.uspto.gov

| | APPLICATION NUMBER | FILING DATE | GRP ART UNIT | FIL FEE REC'D | ATTY.DOCKET.NO | DRAWINGS | TOT CLAIMS | IND CLAIMS |
|---|--------------------|-------------|--------------|---------------|----------------|----------|------------|------------|
| - | 10/082,064 | 02/19/2002 | 2856 | 1036 | 32480/3 | 8 | 66 | 9 |

CONFIRMATION NO. 2139

26155 SHEARMAN & STERLING INTELLECTUAL PROPERTY DOCKETING 599 LEXINGTON AVENUE NEW YORK, NY 10022 FILING RECEIPT

OC000000007721603

Date Mailed: 03/26/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Scott G. Adams, Ithaca, NY; Scott A. Miller, Ithaca, NY; Wendy Jo H. Johnson, Ithaca, NY;

Assignment For Published Patent Application

Kionix, Inc.;

Domestic Priority data as claimed by applicant

Foreign Applications

If Required, Foreign Filing License Granted 03/26/2002

Projected Publication Date: To Be Determined - pending completion of Corrected Papers

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

Accelerometer







Preliminary Class

073

LICENSE FOR FOREIGN FILING UNDER Title 35, United States Code, Section 184 Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Office of Export Administration, Department of Commerce (15 CFR 370.10 (j)); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

PATENT



Express Mail Label No. EE645127921US Attorney Docket No. 32480/3

APR 1 5 2002

UTILITY APPLICATION AND APPLICATION FEE TRANSMITTAL

Commissioner for Patents Box Patent Application Washington, D.C. 20231

Transmitted herewith for filing is the patent application of

Inventor(s): Scott G. Adams, Scott A. Miller, and Wendy Jo H. Johnson

Title:

ACCELEROMETER

Attorney Docket No. 32480/3

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|----|-----------------|---------|-------|---------|
| 1. | ENCLUSED | AKE THE | ruli | LUWING: |

- [X] Return receipt postcard
- [] CD-ROM or CD-R, in duplicate
- [X] PrintEFS bibliographical data sheet (2 pages)
- [X] Certificate of Express Mailing (1 page)
- [X] This Letter (2 pages)
- [X] Patent specification consisting of: Written description (14 pages)Claims (13 pages)Abstract (1 page)
- [X] Informal Drawings (8 sheets)

- [X] Declaration and Power of Attorney (2 pages)
 - [X] newly executed (original or copy)
 - [] has not been executed by all the inventors. An executed Declaration and Power of attorney will be submitted in due course
- [X] Information Disclosure Statement (1 page)
 - [X] Form PTO-1449 (1 page)
 - [X] Copy of 22 cited references
- [X] Assignment papers (see below)

| [|] | Other | |
|---|---|-------|--|
|---|---|-------|--|

2. FILING FEE

[X] Applicant claims Small Entity Status under 37 C.F.R. § 1.27 and 1.28(a).

CALCULATION OF APPLICATION FILING FEE

| | Number Filed | | | | Number Extra | | Rate | Fee |
|------------------------------|-------------------|---|----|---|--------------|---|-------------------|------------|
| Basic filing fee | | 1 | | | | | | \$ 370.00 |
| Total Claims | 66 | - | 20 | = | 46 | × | \$ 9.00 | \$ 414.00 |
| Independent Claims | 9 | - | 3 | = | 6 | × | \$ 42.00 | \$ 252.00 |
| Multiple Dependent Claims | [] yes [X] no | | | | | | \$ 135.00 NONE | \$ 0.00 |
| | | | | | | | Total: | \$1,036.00 |

- [X] A check in the amount of \$ 991.00 in payment of the application filing fee is attached.
- [X] Charge the remaining \$45.00 of the filing fee to Deposit Account 50-0324, Order No. 32480/3.
- [X] The Commissioner is authorized to charge any additional required fees, or credit any overpayment, to Deposit Account 50-0324, Order No. 32480/3.

3. ASSIGNMENT INFORMATION

[X] The application is assigned to Kionix, Inc..

- [X] An Assignment (3 pages, executed) and Recordation Cover Sheet (1 page) are enclosed. Please record the Assignment and return it to the undersigned.
- [X] A check for \$40.00 to cover the recording fee is enclosed.
- [] Please charge the recording fee to our Deposit Account 50-0324, Order No. 32480/3.

4. CORRESPONDENCE ADDRESS

[X] Customer Number 026155

attach bar code sticker here

[] Firm name:

SHEARMAN & STERLING
Intellectual Property Docketing
599 Levington Avenue

(212) 848-7332 Telephone (212) 848-7179 Facsimile

599 Lexington Avenue

(212) 848-4000 general telephone

New York, New York 10022

5. GOVERNMENT SPONSORED RESEARCH

The invention was made by an agency of the United States Government or under contract with an agency of the United States Government. [X] no

Respectfully submitted,

SHEARMAN & STERLING

Dated: October 19, 2001

Matthew T. Byrne

Registration No. 40,934





Date: October 19, 2001

Atty. Docket No. 32480/3

In re Application of Scott G. Adams, et al.

For:ACCELEROMETER

Date: October 19, 2001

Atty. Docket No. 32480/3

In re Application of Scott G. Adams, et al.

For:ACCELEROMETER

Filed: concurrently herewith on October 19, 2001

__ Enclosed ____

1. Checks in the amount of \$ 991:00 and \$40.00

2. This postcard

Certificate of Express Mailing No EE645127921US

4. PrintEFS bibliographical data sheet (2 pages)

5. Utility Application and Appl'n Fee Transmittal (2 pages)

6. Patent specification consisting of: cover page, written description (14 pages), claims (13 pages), abstract (1 page)

7. Informal Drawings (8 sheets)

8. Declaration and Power of Attorney (2 pages, executed)

9. Information Disclosure Statement (1 page)

10. Form PTO-1449 (1 page)

11. 22 references

12. Recordation Form Cover Sheet (1 page)

13. Assignment (3 pages, executed)

jc828 U.S. PTO 10/082064

02/19/02

PLEASE DATE STAMP AND RETURN TO ACKNOWLEDGE RECEIPT



Atty. Docket No. 32480/3

IN THE ENITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Scott G. Adams, et al.

Filed:

Concurrently Herewith on October 19, 2001

Title:

ACCELEROMETER

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OFFICE OF PETITIONS

CERTIFICATE OF EXPRESS MAILING

"Express Mail" Mailing Label No.: EE645127921US

Date of Deposit: October 19, 2001

I hereby certify that the following:

Return postcard

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22 references

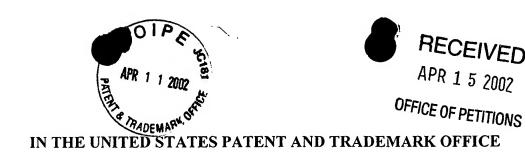
Recordation Form Cover Sheet (1 page)

Assignment (3 pages, executed)

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the Date of Deposit indicated above in an envelope addressed to the Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.

Signature of Person Making Deposit

SHEARMAN & STERLING 599 Lexington Avenue New York, NY 10022 (212) 848-4000



Application for Patent for ACCELEROMETER

by

Scott G. Adams Scott A. Miller Wendy Jo H. Johnson

Shearman & Sterling 599 Lexington Avenue New York, New York 10022 (212) 848-4000

> Atty. Docket 32480/3 Express Mail Label EE645127921US

ACCELEROMETER

BACKGROUND

The invention relates to accelerometers.

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Accelerometers are devices that measure acceleration, or changes in a rate of motion. When an elevator starts or stops, several portions of the human body can detect the change in motion and report the change to the brain. Similarly, known accelerometers use different mechanical and electrical techniques to detect changes in motion, and to report the changes to processors. Accelerometers are used in navigational systems, automatic seat belt and air bag triggers, and many other applications.

In known techniques for manufacturing semiconductors, a single crystal of silicon is grown, and then photographic and lithographic techniques are used to etch away unwanted parts of the silicon, and to introduce doping atoms into the silicon to change the electrical properties of the silicon. It is also known to deposit other materials onto the silicon – for example, thin layers of metal may be deposited onto the silicon to serve as conducting wires between different portions of a circuit. The underlying silicon serves as a structural base to provide mechanical support for the metal, while the metal provides the electrical conductivity.

SUMMARY

In general, in a first aspect, the invention features an accelerometer. The accelerometer includes a fixed structure, a movable structure, and a resilient coupling. The fixed and movable structures generally lie in a plane. The fixed structure bears a fixed electrode, and the movable structure bears a movable electrode. The resilient coupling is designed to retain the fixed and movable structures in capacitive opposition to each other across a capacitance gap while allowing motion of the movable electrode relative to the fixed electrode in response to acceleration along an axis of acceleration perpendicular to the plane, and to resiliently restore the two electrodes to an equilibrium position when the acceleration ceases. Electronics and/or software is designed to translate a measurement of capacitance between the fixed and movable electrodes into a measurement of the acceleration along the axis.

In general, in a second aspect, the invention features an accelerometer. The accelerometer includes a fixed portion, a movable portion, and a resilient coupling. The fixed and movable portions generally lie in a plane. The resilient coupling is designed to allow motion

PATENT



Atty. Docket No. 32480/3 Express Mail Label No. EE645127921US

DECLARATION AND POWER OF ATTORNEY

Each one of us, Scott G. Adams, Scott A. Miller, and Wendy Jo H. Johnson hereby declares that:

My residence, mailing address, and citizenship are as stated below next to my name;

I verily believe that we are the original, first, and joint inventors of the invention or discovery entitled ACCELEROMETER, which is described and claimed in the attached specification;

I acknowledge my duty to disclose information that is material to the examination of the application in accordance with 37 C.F.R. § 1.56(a);

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

POWER OF ATTORNEY: I hereby appoint the following attorneys to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

James R. Warnot, Jr., Reg. No. 34,455, David M. Klein, Reg. No. 35,221, David E. Boundy, Reg. No. 36,461, Donna Marie Werner, Reg. No. 36,719, Matthew T. Byrne, Reg. No. 40934, Warren L. Nachlis, Reg. No. 41,216, Alex V. Chachkes, Reg. No. 41,663, Chad M. Yohn, Reg. No. 42,246, Antoinette E. Baker, Reg. No. 44,018, and Anthony Meola, Reg. No. 44,936, all of Shearman & Sterling, 599 Lexington Avenue, New York, NY 10022, (212) 848-4000.

Send correspondence to:

Shearman & Sterling Intellectual Property Docketing 599 Lexington Avenuc New York, NY 10022

Direct telephone calls to Matthew T. Byrne, Esq. at telephone number (212) 848-7332.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

First Inventor:

Scott G. Adams

Residence:

413 Mitchell Street, Ithaca, New York 14850

Citizenship:

United States

Mailing Address:

413 Mitchell Street, Ithaca, New York 14850

Signature of First Inventor:

Date:

Second Inventor:

Scott A. Miller

10/19/01

Residence:

64 Gunderman Road, Ithaca, New York 14850

Citizenship:

United States

Mailing Address:

64 Gunderman Road, Ithaca, New York 14850

Signature of Second Inventor:

Date:

Third Inventor:

Wendy Jo H. Johnson

Residence:

56 Teeter Road, Ithaca, New York 14850

Citizenship:

United States

Mailing Address:

56 Teeter Road, Ithaca, New York 14850

Signature of Third Inventor:

Date:





Art Unit: 2856

Examiner: Not yet known

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NYDOCS04/341601.1 1

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on April 3, 2002.

1

Typed or printed name of person signing this certificate:

Matthew T. Byrne

Respectfully submitted,

Matthew T. Byrne

Registration No. 40,934

SHEARMAN & STERLING

Customer No. 26155

599 Lexington Avenue

New York, New York 10022

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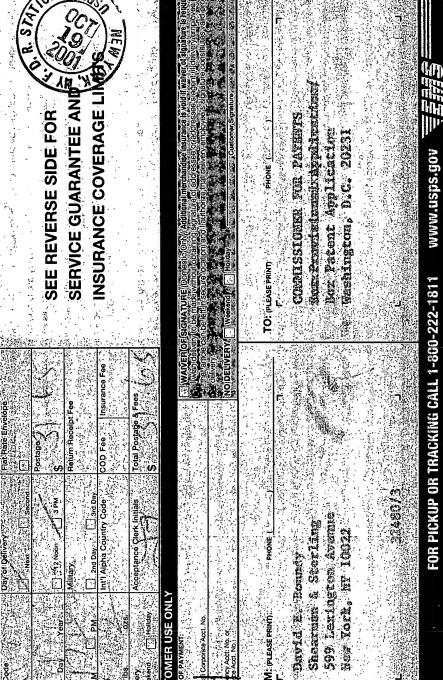
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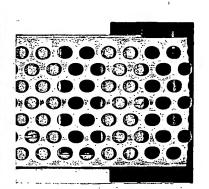
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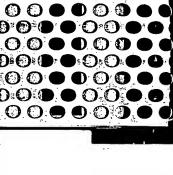
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